



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

For the week ending October 11, 2014 - Week 41

All data presented in this report are provisional and may change as additional reports are received



Quick Stats	
Percent of outpatient visits for ILI ¹	0.31% (baseline 1.7%)
Percent of influenza rapid test positive	1.7% (5/238)
Percent of RSV rapid tests positive	0.0% (0/54)
Percent school absence due to illness ²	1.92%
Number of schools with ≥10% absence due to illness	0
Influenza-associated hospitalizations ³	1/1,592 inpatients surveyed
Influenza-associated pediatric mortality	0

¹ ILI: Influenza-like illness is defined as a fever of ≥100° F as well as cough and/or sore throat.

² Percent school absence due to illness are reported through a weekly survey of Iowa sentinel schools

³ Hospitalizations due to influenza are voluntarily reported through a weekly survey of Iowa sentinel hospitals

Iowa Influenza Geographic Spread ²	
No Activity	
Sporadic	
Local	
Regional	
Widespread	

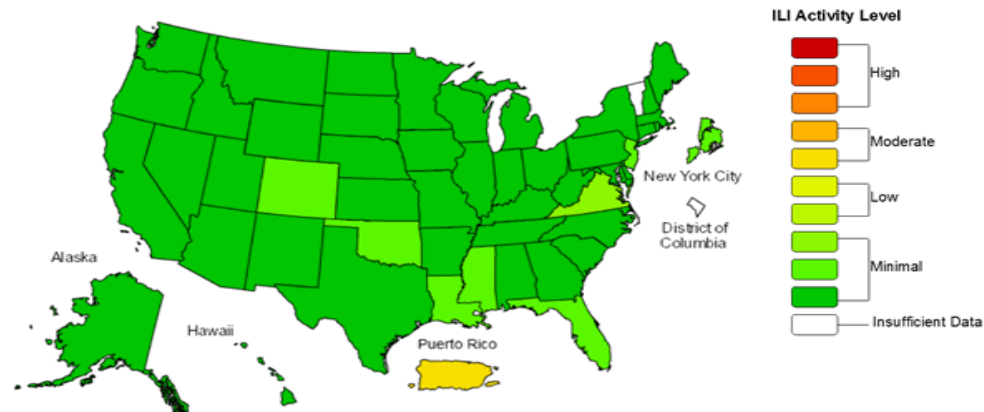
² This is based on CDC's activity estimates definition
www.cdc.gov/flu/weekly/overview.htm

Iowa statewide activity summary:

Influenza activity in Iowa is low. For this reporting week, the State Hygienic Laboratory confirmed two Flu A (H3) cases. The proportion of outpatient visits due to influenza-like illness (ILI) was 0.31 percent which is well below the regional baseline. One influenza-associated hospitalization was reported from sentinel hospitals. No schools reported 10 percent or greater absenteeism due to illness. In addition, five cases of adenovirus, seven cases of parainfluenza virus type 2, and 30 cases of rhinovirus/enterovirus were reported to IDPH.

National activity summary - www.cdc.gov

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
 2014-15 Influenza Season Week 41 ending Oct 11, 2014



During week 41, the following influenza activity was reported: Widespread influenza activity was reported by Guam. Local influenza activity was reported by Puerto Rico and four states (Florida, New Hampshire, North Dakota, and Virginia). Sporadic influenza activity was reported by the District of Columbia and 36 states (Alabama, Alaska, Arkansas, California, Colorado, Connecticut, Delaware, Georgia, Hawaii, Idaho, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Nebraska, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming). No influenza activity was reported by the U.S. Virgin Islands and 10 states (Arizona, Illinois, Kansas, Massachusetts, Mississippi, Missouri, Montana, Oklahoma, Nevada, and Rhode Island).

International activity summary - www.who.int

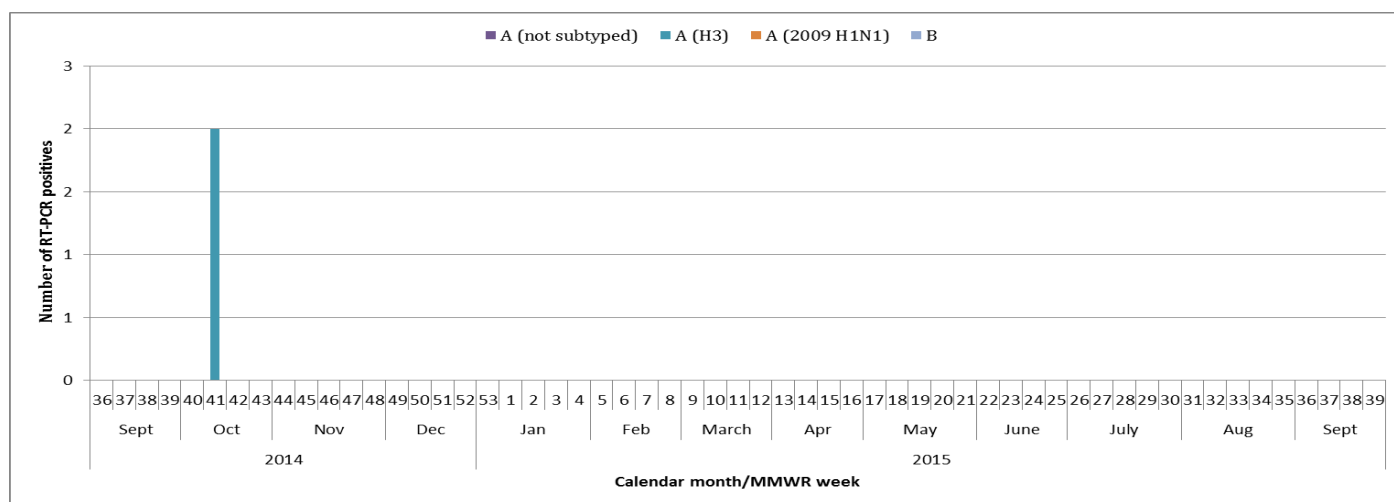
Globally, the southern hemisphere influenza season seems to be coming to an end, with still high activity in Oceania. Elsewhere influenza activity remained low, except for some tropical countries in the Americas. In Europe and North America, influenza activity remained at inter-seasonal levels. In tropical countries of the Americas, influenza B co-circulated with respiratory syncytial virus (RSV). In Africa and western Asia, influenza activity was low. In eastern Asia, influenza activity in most countries remained low or decreased following influenza A(H3N2) activity in August and September. In the southern hemisphere, influenza activity decreased in most countries. In the temperate zone of South America, influenza-like illness (ILI) decreased and was still mainly associated with RSV. Influenza A(H3N2) virus was the most detected influenza virus. In Australia and New Caledonia, the influenza season continued with high activity associated with A(H1N1)pdm09 and A(H3N2) viruses. ILI activity increased in several of the Pacific Islands. Based on FluNet reporting (as of 2 October 2014, 11:15 UTC), during weeks 37 to 38 (07/09/2014 to 20/09/2014), National Influenza Centres (NICs) and other national influenza laboratories from 50 countries, areas or territories reported data. The WHO GISRS laboratories tested more than 21796 specimens. 1540 were positive for influenza viruses, of which 1049 (68.1 percent) were typed as influenza A and 491 (31.9 percent) as influenza B. Of the sub-typed influenza A viruses, 289 (38.9 percent) were influenza A(H1N1)pdm09 and 454 (61.1 percent) were influenza A(H3N2). Of the characterized B viruses, 52 (96.3 percent) belonged to the B-Yamagata lineage and 2 (3.7 percent) to the B-Victoria lineage.

Laboratory surveillance program:

The State Hygienic Laboratory (SHL) is the primary lab for influenza testing and reporting in Iowa. SHL reports the number of tests performed and the type and strain of positive tests to the influenza surveillance network several times every week. In addition, SHL surveys clinical and reference labs for the number of rapid-antigen tests performed and number positive weekly. This report also includes the positive non-influenza virus tests reported from SHL, the Dunes Medical Laboratories at Mercy Medical Center in Sioux City, and Iowa Methodist Medical Center in Des Moines.

Age Group	CURRENT WEEK - MMWR WEEK 41							YEAR TO DATE (9/1/14 – Present Week)					
	Flu A				Flu B	Equiv/Indeterminate	Neg	Flu A				Flu B	Neg
	A (2009 H1N1)	A (H3)	A(H3N2) variant	Subtype Pending				A (2009 H1N1)	A (H3)	A(H3N2) variant	Subtype Pending		
0-4	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	1(8%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	4(9%)
5-17	0(0%)	1(50%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	1(50%)	0(0%)	0(0%)	0(0%)	4(9%)
18-24	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	6(46%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	17(39%)
25-49	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	2(15%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	9(20%)
50-64	0(0%)	1(50%)	0(0%)	0(0%)	0(0%)	0(0%)	1(8%)	0(0%)	1(50%)	0(0%)	0(0%)	0(0%)	7(16%)
>64	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	3(23%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	3(7%)
Total	0	2	0	0	0	0	13	0	2	0	0	0	44

*Counts of three or less are sometimes suppressed to protect confidentiality. Note that counts may not add up to the total due to missing age information
Only cases of Iowa residents are included



Rapid influenza and RSV tests:

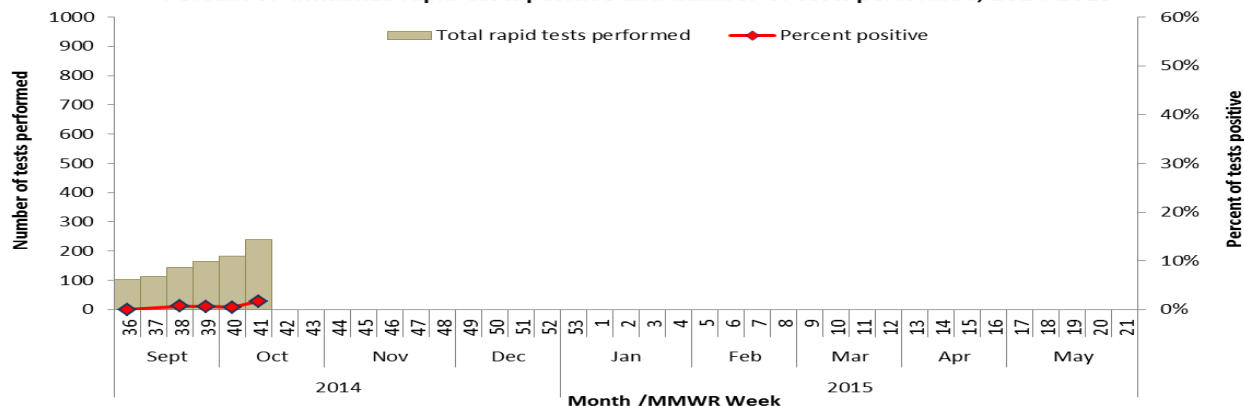
Table 2: Percent of influenza rapid tests positive and number of tests performed by region for the present week

REGION*	RAPID ANTIGEN INFLUENZA TESTS					RAPID ANTIGEN RSV TESTS		
	Tested	Flu A	Flu B	Undefined	% Positive	Tested	Positive	% Positive
Region 1	24	0	0	0	0.0	2	0	0.0
Region 2	6	1**	1**	0	16.7	5	0	0.0
Region 3	15	0	0	0	0.0	9	0	0.0
Region 4	22	0	0	0	0.0	5	0	0.0
Region 5	25	0	0	0	0.0	6	0	0.0
Region 6	146	1	2	2	2.1	27	0	0.0
Total	238	2	3	0	1.7	54	0	0.0

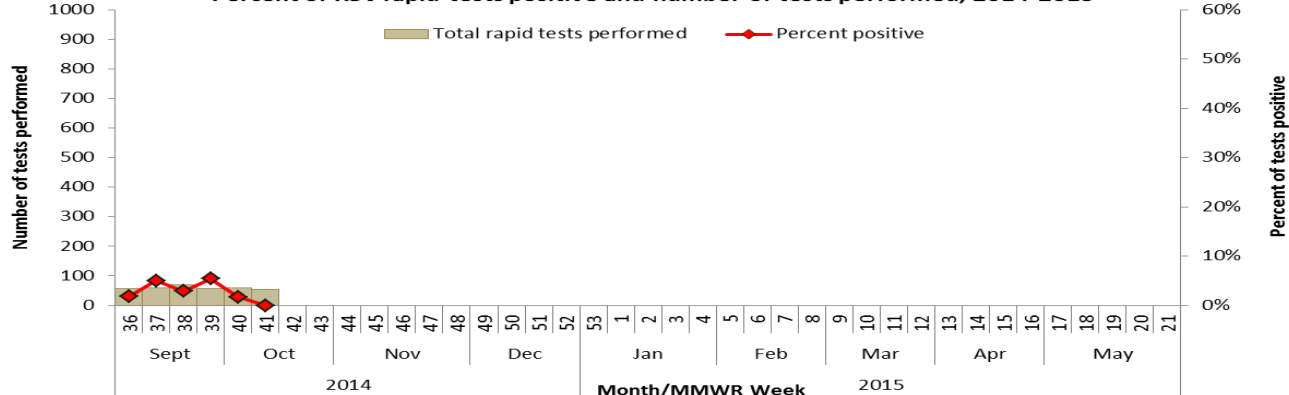
*Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright; Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury; Region 4- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union; Region 5- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne; Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott.

**Result positive for both Flu A and Flu B.

Percent of influenza rapid tests positive and number of tests performed, 2014-2015



Percent of RSV rapid tests positive and number of tests performed, 2014-2015



Non-influenza respiratory virus:

Table 3: Number of positive results for non-influenza respiratory virus isolated by Mercy Dunes in Sioux City and Iowa Methodist Medical Center

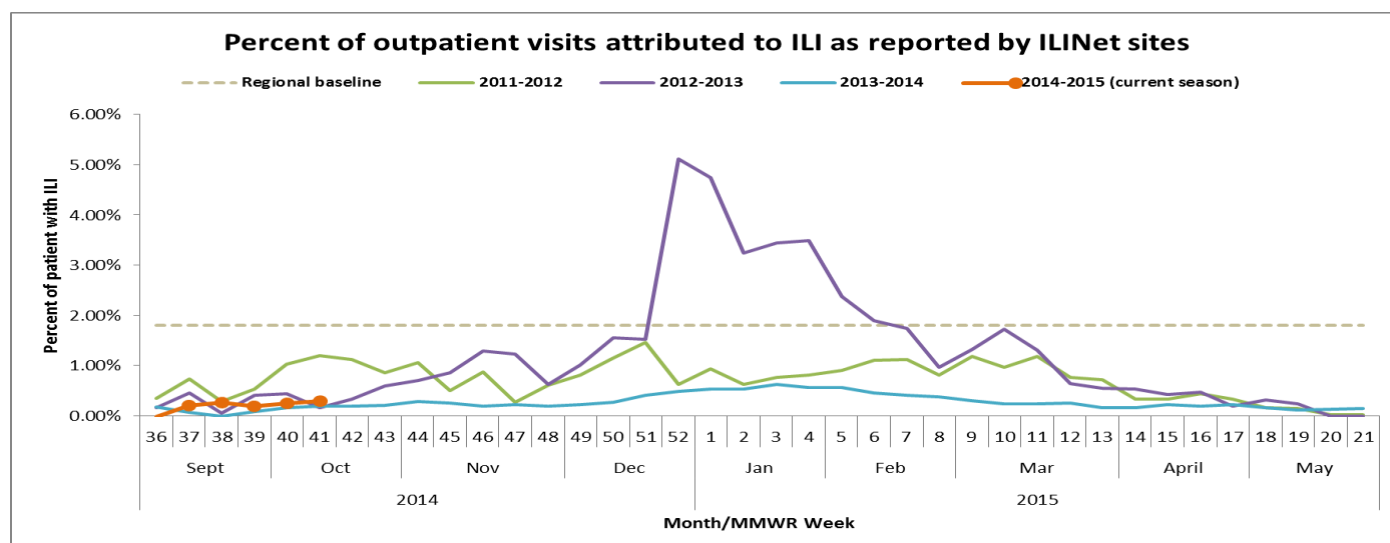
Viruses	Current Week	Cumulative (9/1/14 – Present Week)
Adenovirus	5	15
Parainfluenza Virus Type 1	0	0
Parainfluenza Virus Type 2	7	19
Parainfluenza Virus Type 3	0	0
Parainfluenza Virus Type 4	0	1
Rhinovirus/Enterovirus	30	196
Respiratory syncytial virus (RSV)	0	1
Human metapneumovirus (Hmpv)	0	0
Total	42	232

Outpatient health care provider surveillance program (ILINet)

Outpatient health care providers who participate in the ILINet (a national influenza surveillance program) report the number of patients seen with influenza-like illness and the total number of patient visits each week. This system is a key part of Iowa's influenza surveillance. Iowa health care providers interested in joining this surveillance program should contact Kemi Oni at 515-725-2136 or Oluwakemi.oni@idph.iowa.gov for more information.

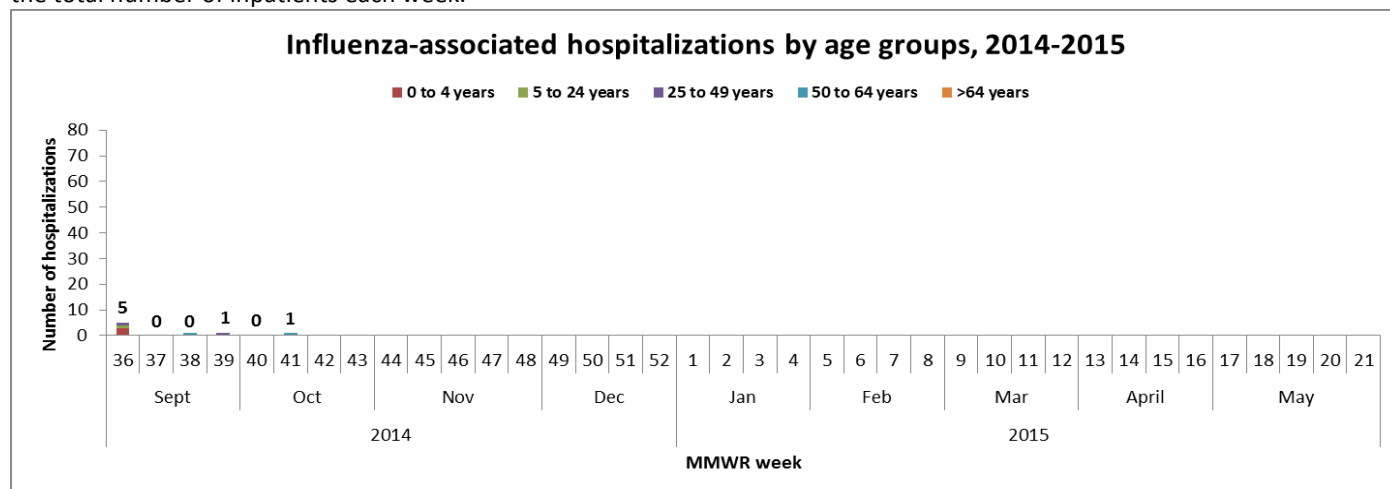
Table 4: Outpatient visits for influenza-like illness (ILI) – past 3 weeks

Week	%ILI	Total ILI	Age 0-4	Age 5-24	Age 25-49	Age 50-64	Age >64
Week 39, ending Sept 27	0.19	60	19	33	6	2	0
Week 40, ending Oct 4	0.25	81	22	51	4	3	1
Week 41, ending Oct 11	0.31	97	24	57	10	4	2

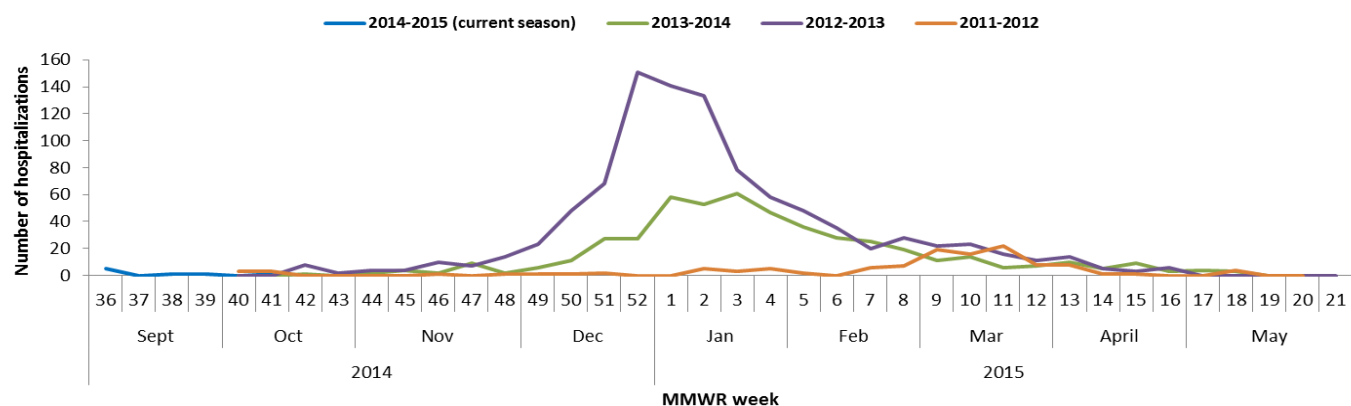


Influenza-associated hospitalizations

Sentinel hospitals that participate in IISN voluntarily track and report the number of influenza-associated hospitalizations and the total number of inpatients each week.



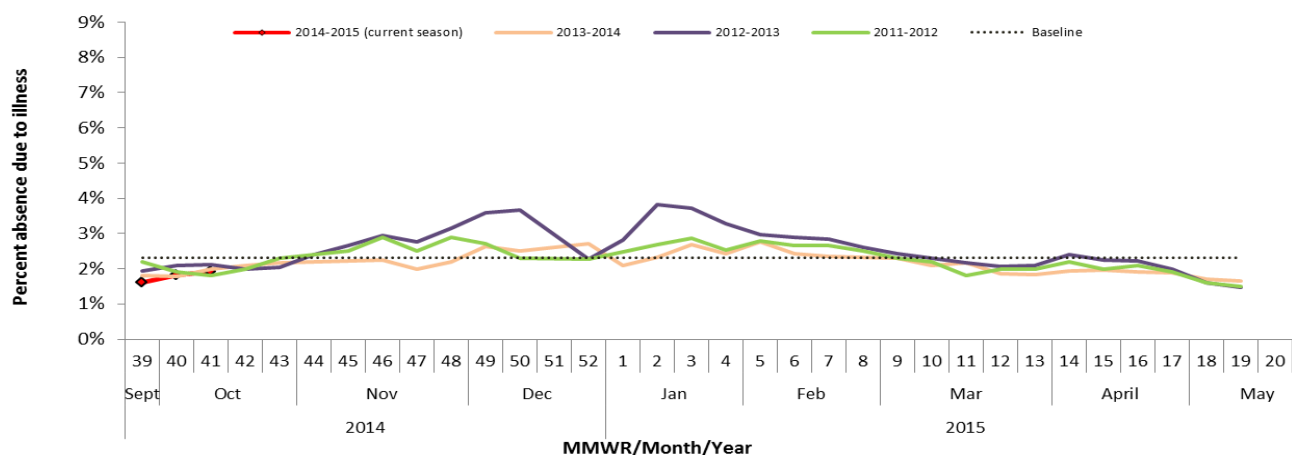
Influenza-associated hospitalizations reported by hospital surveillance sites



School surveillance program

Sentinel schools that participate in IISN voluntarily track and report absence due to all illness (including non-influenza illnesses) and the total enrollment each week.

Percent of enrolled students absent due to illness



Other resources

Neighboring states' influenza information:

Illinois: <http://www.idph.state.il.us/flu/surveillance.htm>

Minnesota: www.health.state.mn.us/divs/idepc/disease/flu/stats/

Missouri: <http://health.mo.gov/living/healthcondiseases/communicable/influenza/reports.php>

South Dakota: <http://doh.sd.gov/diseases/infectious/flu/>

Wisconsin: www.dhs.wisconsin.gov/communicable/influenza/surveillance.htm